

LIST OF THE BATRACHIA AND REPTILIA OF THE BAHAMA ISLANDS.

By E. D. COPE.

The material on which the determinations in this paper are based is the following :

A collection from New Providence and Andros, by Prof. H. C. Wood, of the University of Pennsylvania.

A collection from Turk's Island, made by Prof. A. J. Ebell, of New York.

A collection made at New Providence by Prof. H. C. Chapman, of the Jefferson Medical College, Philadelphia.

A collection made by Messrs. C. H. Townsend, J. E. Benedict, and Fisher, of the U. S. Fish Commission, during the cruise of the steamer Albatross, at Cat Island, Watling's Island, Rum Key, New Providence, and Abaco.

The collection last named is the most extensive, but it did not contain several species which were included in the others.

BATRACHIA.

ANURA.

*Hylodes ricordii* D. & B. *Hylodes planirostris* Cope, Proceeds. Acad. Phila., 1862, 153; 1863, 48.

New Providence, *F. W. Putnam*; *H. C. Chapman*.

Found also in Cuba and in Southern Florida.

*Trachycephalus septentrionalis* Tsch.

New Providence; *Chapman*.

REPTILIA.

LACERTILIA.

*Sphærodactylus notatus* Baird.

Watling's Island (No. 14580 Nat. Mus.); New Providence, *Townsend*; Abaco, *Orr*. Found also at Key West, Florida.

*Anolis distichus* Cope.

New Providence, *Wood*; Abaco, *Townsend*. Also St. Domingo.

*Anolis sagræ* Bibron.

New Providence, *Wood*, *Townsend*; Abaco, *Townsend*, *Orr* (14577). Common in Cuba and Yucatan.

*Anolis ordinatus* Cope, Proceeds. Acad. Phila., 1864, p. 175.

Turk's Island, *Ebell*.

*Anolis principalis* Linn., var. *porcatus* Gray.

Abaco, *Townsend*. Cuba.

*Cyclura bæolopha* Cope.

Andros, *Wood*.

*Cyclura nubila* Gray, Cope, *Proceeds. Am. Philos. Soc.*, 1885, p. 262.

Cat Island, *Townsend*. Also Cuba.

*Cyclura carinata* Harlan.

Turk's Island, *Ebell*.

This species is clearly distinct from the ordinary form of Cuba and the Bahamas. The comb of the third posterior digit found in the other species of the genus is here represented by a few distinct scales of identical form with, but rather larger size than the others, on the border of the toe, the gradation of proportions being complete. The small granular scales of the muzzle form also a marked difference. I mention here that the combs of the *C. bæolopha* and *C. nubila* are like those of the *C. cornuta*, and not like those of the *C. carinata*, as stated in my synopsis of the species of *Cyclura* in the *Proceedings of the Amer. Philosoph. Soc.*, 1885, p. 262.\*

*Liocephalus carinatus* Gray.

New Providence, *Wood*; Abaco, *Townsend*; 14566. Also Cuba.

*Liocephalus loxogrammus*, sp. nov.

The species belongs to the group with only two frontonasal plates on each side, with the *L. raviceps* and *L. personatus*. From all of these species it differs considerably in color, and in some structural peculiarities, as follows:

The dorsal scales are larger than in *L. raviceps*. There are eleven rows on the nape between the external angles of the parietal scuta. The scales are, however, not subequal, as in *L. personatus* and *L. trigeminatus*; but those on the sides are much smaller than those of either the back or belly. Thus in the last-named species I count thirty-five rows between points just above the axilla and groin. In *L. loxogrammus* there are fifty-seven rows. The dorsal and caudal crests are not so elevated in the *L. loxogrammus* as in the species named, although the caudal is more elevated than the dorsal. The posterior frontonasals are remarkably large, as in the *L. raviceps*, and the head plates are all

\*In describing a new species of *Cachryx* (*C. erythromelas*) Dr. Boulenger, in the *P. Z. Soc. London*, 1886, p. 241, finds my criticism of Mr. Bocourt's disposition of that genus apparently self-contradictory. Mr. Bocourt wished to identify *Cachryx* with *Hoplocercus*, and I declared them to be not alike, meaning by this, not identical. I had previously asserted some likeness of *Cachryx* to *Hoplocercus*, which it has, of a superficial kind, but at the same place I stated, "this genus is decidedly iguaniform," and compared it with *Ctenosaura*. As Dr. Boulenger places *Cachryx* between *Ctenosaura* and *Hoplocercus*, it is evident that his opinion of its affinities is the same as my own, expressed some twenty years ago.

strongly keeled. The external parietals are not twice as wide as the internal, and the latter are in contact posteriorly for half their length, reducing the interparietal to a very small size. Temporal scales moderate, keeled; those of the auricular border not larger than the others. Supranasals narrow, in contact with the rostral shield, and generally separated by a small internasal; this is followed by a small first interfrontonasal, which separates the small anterior frontonasals, and this by a small second interfrontonasal, which generally does not prevent the mutual contact of the posterior frontonasals. The tail is compressed, except at the base. The extended hind limb reaches the eye. The prehumeral fold is strong, and has some large scales on its edge, foreshadowing the collar scales of collared forms.

Color olivaceous above, light olive yellowish below. There is a dark lateral band, which is very indistinct behind the axilla. Anterior to this point it is black, and is subdivided posteriorly two or three times by vertical rows of yellow spots. A small yellow spot on the anterior auricular margin. There are numerous short blackish lines on the sides and dorsal region along the sutures between scale-rows, which are therefore directed upwards and backwards. These are most distinct in females. The males have, in addition, a row of blackish spots on each side on the nape. Top of head brown. The belly is marked by cross-rows of small brown dots three or four scales apart; the scales in the intervals more or less dotted with white and pink. Legs brown, spotted above.

*Measurements.*

|  | ♂    | ♀    |
|--|------|------|
| Length to vent.....                    | .078 | .066 |
| Length of head above.....              | .019 | .016 |
| Width of head at temporal regions..... | .015 | .012 |
| Length to axilla.....                  | .007 | .033 |
| Length of fore leg.....                | .029 | .025 |
| Length of hind leg.....                | .062 | .053 |
| Length of hind foot.....               | .032 | .029 |

Numerous specimens from Rum Key; No. 14569.

Boulenger in the Vol. II of the Catalogue of the lizards in the British Museum regards *L. raviceps* as the same as *L. macropus*. They are, however, different species, belonging to different sections of the genus. The *L. trigeminatus* is probably the immature stage of *L. personatus*, with which Dr. Boulenger properly unites it.

*Amiva thoracica* Cope.

New Providence, Wood; Abaco, Townsend. Nos. 14566, 14574.

*Mabuia agilis* Raddi; Boulenger, Catal., iii, p. 190; *M. cepedii* "Gray," Cope, Proceeds. Amer. Philos. Soc., 1870, p. 553.

Turks Island, Ebell.

OPHIDIA.

*Typhlops lumbricalis* Linn.

Abaco, *Townsend*. No. 14579. The most northern locality for this West Indian species. The muzzle is more pronounced than in the usual form.

*Stenostoma melanoterma* Cope, *Journal Academy Philada.*, 1875., p. 128.

Watling's Island, *Townsend*. No. 14578. Several specimens not distinguishable from the types from Paraguay by description, as above cited.

*Chilabothrus strigilatus* Cope. *Epicrates versicolor* Steindachner.

New Providence, *Wood, Townsend*.

*Chilabothrus chrysogaster* Cope. *Homalochilus chrysogaster* Cope, *Proceeds. Amer. Philos. Society*, 1870, p. 557.

In my *Synopsis of the Genera of Snakes*, published in the *Proceeds. American Philos. Society*, 1886, p. 483, I have regarded *Homalochilus* Fisch., as a synonym of *Chilabothrus* D. & B.

Turks Island, *Ebell*.

*Ungualia maculata* Gray.

New Providence, *Wood, Chapman, Townsend*.

*Ungualia cana* Cope, *Proceeds. Acad. Phila.*, 1863, p. 129.

Inagua.

*Diadophis rubescens* Cope, *Proceeds. Amer. Philos. Soc.*, 1885, p. 403.

New Providence, *Chapman*.

*Halsophis vudii* Cope.

New Providence, *Wood, Townsend*.

Batrachia:

RECAPITULATION.

|                  |  |  |  |  |    |
|------------------|--|--|--|--|----|
| Anura .....      |  |  |  |  | 2  |
| Reptilia:        |  |  |  |  |    |
| Lacertilia ..... |  |  |  |  | 12 |
| Ophidia .....    |  |  |  |  | 8  |
|                  |  |  |  |  | 22 |

These species may be classified as follows, with reference to their geographical relations, as they are found in—

|                  | North America. | Cuba. | St. Domingo. | West Indies in general. | Peculiar. |
|------------------|----------------|-------|--------------|-------------------------|-----------|
| Anura .....      | 1              | 1     | 1            | 1                       | 5         |
| Lacertilia ..... | 2              | 5     | 2            | 1                       | 5         |
| Ophidia .....    |                | 1     |              | 3                       | 5         |
|                  | 3              | 7     | 3            | 4                       | 10        |

The species which occur in North America, except the *Anolis principalis*, are found in the southern part of Florida only, and cannot be looked on as yet as more than accidentally there. The proportion of species peculiar to the islands is large and will be probably increased by further exploration.